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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,001	05/14/2001	Michael R. Oldenburg	14036	1209

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EXAMINER

PATEL, VISHAL A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,001

Applicant(s)

OLDENBURG, MICHAEL R.

Examiner

Vishal Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 1-36, 62 and 63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claims 62-63 are directed to a figure other than figure 7 (the sleeve dimensioned to house a bearing).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 37-39, 42-44 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Carson et al (US. 3,135,518).

Carson discloses a seal comprising:

a housing structure adapted to surround a shaft wherein the housing structure (40) comprises a means (35) for preventing foreign material from entering the sealed area;

the housing structure comprises a sleeve (20), a casing (40) and a faceplate (46), wherein the faceplate is operably coupled to the sleeve.

Regarding claim 39-:

a method for sealing dynamic shaft assembly containing a bore for receiving a seal (seal received in bore, figure 4), comprising;

providing a seal having a faceplate and at least one structure (26 between 46 and 22) between an inner and an outer portion (face plate 46 between outer portion 40 and inner portion

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20) of the seal that substantially limits foreign particles from entering the seal, wherein the faceplate is operably coupled to the inner portion;

placing the seal into the bore;

the seal further comprises a first flange (32) extending radially inwardly from the outer portion and a main sealing lip (member 34 having a main lip 35) that is biased by a garter spring;

the seal further comprises a second flange (22) extending radially outwardly from, and generally perpendicular to, the inner portion;

the inner portion has a bore that is coated with an elastomeric coating (21);

Regarding claims 49-52, 55 and 57-61:

a seal for sealing a dynamic shaft assembly comprising;

a sleeve (20) adapted to be disposed generally coaxially around a shaft;

a casing (40) adapted to be generally arranged to surround the sleeve;

a faceplate, located between the sleeve and the casing, having an inside face and an outside face, the face plate generally perpendicular to the sleeve (face plate 46 or 43);

a first flange extending radially outwardly from the sleeve (flange 22);

at least one flexible member extending radially outwardly from the first flange (26);

at least one flexible member is made at least in part with an elastomeric material;

a main sealing lip in contact with the sleeve (34 having 35);

the main sealing lip is biased with a garter spring;

a second flange extending radially inwardly from the casing (flange 42).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 40-41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Seeh et al (US. 5,096,207).

Carson discloses the invention substantially as claimed above but fails to disclose a perimeter lip extending radially inwardly from the first flange and at least one excluder lip. Seeh discloses to have a seal that has a main lip biased by a garter spring, a perimeter lip and an excluder lip (3 has a main lip that is biased by a garter spring, a perimeter lip that is next to main lip and an excluder lip that is next to the perimeter lip). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the member (34 which has a main lip) of Carson to have perimeter lip and an excluder lip as taught by Seeh, to reduce the amount of debris entering the seal (figure 1).

5. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Fedorovich et al (US. 4,552,367).

Carson discloses the invention substantially as claimed above but fails to disclose the outer portion is covered with an elastomeric coating. Fedorovich teaches to have an inner and an outer portions of a seal (inner portion 108 and outer portion 102 which are covered by an elastomer) to be covered by an elastomer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the outer portion of Carson to

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have a covering of elastomer as taught by Fedorovich, to provide a seal between the outer portion and a housing.

6. Claims 49-52 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Karcher (US. 4,696,479).

Carson discloses the invention substantially as claimed above but fails to disclose a filtering material portion, wherein the filtering material portion contacts the inside face of the faceplate. Karcher teaches to place a felt filter portion that contacts an inside face of a faceplate (felt filter 70). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the faceplate of Carson to have a felt filter as taught by Karcher, to reduce debris from entering the seal and to trap debris.

7. Claims 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson and Karcher as applied to claim 51 and further in view of Dossena (US. 6,450,503).

Carson and Karcher disclose the invention substantially as claimed above but fail to disclose a perimeter lip extending axially inward from the flange and the perimeter lip is constructed at least in part with an elastomeric material. Dossena teaches to have a seal having a first flange and a second flange extending from the first flange (first flange that holds lip 11 and the second flange extending from the first flange), a sleeve having a flange and the flange of the sleeve to have a seal which has multiple sealing members (40 extending inwardly, 39 extending outwardly and 35 extending outwardly). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the second flange (33) and the first flange of Carson to have a first and second flange and multiple lips as taught by Dossena, to prevent or reduce debris from entering the sealed environment.

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8. Claim 49 and 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Hatch et al (US. 4,943,068).

Carson discloses the invention substantially as claimed above but fails to disclose a filtering material portion, wherein the filtering material portion contacts the inside face of the faceplate. Hatch teaches to place a felt filter portion that contacts an inside face (inside of 33) of a faceplate (synthetic filter 45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the faceplate of Carson to have a synthetic filter as taught by Hatch, to reduce debris from entering the seal and to trap debris.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toth et al, Peach, Jay, Tripathy, Katzensteiner, Cox et al and Forch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (703) 309-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

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For informal or draft communications, please label "**PROPOSED**" or "**DRAFT**" and fax to: 703-746-3814.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP

January 25, 2003



Anthony Knight
Supervisory Patent Examiner
Tech. Center 3600